

**ABSTRACT**

A system generates an alarm at one unit of the system when a second unit of the system is more than a predetermined distance from the first unit. The system has a first transceiver unit with a first transmitter for transmitting a first reference signal having a phase with respect to a reference source, and a first receiver for detecting a second reference signal having a phase which bears a relationship to that of the first reference signal. There is a second, portable, transceiver unit with a second transmitter for transmitting the second reference signal after receipt of the first reference signal. The first transceiver unit includes a distance resolver for determining the distance between the two transceiver units from the phases of the first and second reference signals, and an alarm, responsive to the distance resolver, for generating an alarm signal if the distance between the two transceiver units is more than a predetermined amount.